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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,601	12/28/2000	Sudheer Dharanikota	1285-0039US ALC-135759	6768

7590 06/15/2004

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EXAMINER

SCHEIBEL, ROBERT C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/750,601

Applicant(s)

DHARANIKOTA, SUDHEER

Examiner

Robert C. Scheibel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-25 is/are allowed.
- 6) ☒ Claim(s) 1,6-9,16-19,21 and 26 is/are rejected.
- 7) ☒ Claim(s) 2-5,10-15,20 and 27-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - the phrase “packets pertains” on lines 19-20 of page 7 should be changed to “packets pertain”.

Appropriate correction is required.

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

3. Claims 15 and 22 are objected to because of the following informalities:
 - the phrase “wherein said wherein said” on line 2 should be changed to “wherein said”;
 - the phrase “an ingress portion a network processor system” should be changed to “an ingress portion of a network processor system”.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims **6-9, 16-19 and 21** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 6-9, 16-19, and 21 recite the limitation "the number of" in line 4 of each claim. There is insufficient antecedent basis for this limitation in the claim. This rejection can be overcome by changing the phrase to "a number of" in each instance.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims **1 and 26** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,611,522 to Zheng et al.

Regarding claims **1 and 26**, the ingress and egress terminating line cards are disclosed in the line cards 130-138 of Figure 9; each line card is operable as an ingress line card and is also operable as an egress line card. The switch fabric disposed between the line cards is disclosed in the interconnect 62 shown throughout the figures. The interconnect 62 supports a plurality of virtual ingress/egress pipes in that it provides connections between each of the plurality of line cards; each of these connections is a

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virtual pipe between ingress and egress cards. The limitation that the ingress and egress cards are provided with a plurality of buffer queues to support traffic flows associated with the VIEPs (see receive input queue 256 (also referred to as element 286 in the specification – see lines 29-31 of column 23) and queues 146 of figure 9 and queues 622 of figures 33-35). The policing structure is disclosed in the police function of element 142 on figure 9. The ingress flow controller (claim 1) and buffer acceptance and flow control module (claim 26) are disclosed in the classify function of element 142 and the interconnect prioritization element 148 of figure 9. The egress flow controller (claim 1) and buffer acceptance and flow control module (claim 26) are disclosed in the shape function of element 144 and the interconnect prioritization element 148 of figure 9. The scheduler (claim 1) and traffic shaping and scheduling module (claim 26) are disclosed in the scheduler 144 of figure 9.

Allowable Subject Matter

9. Claims **22-25** are allowable over the prior art of record.

10. The following is an examiner's statement of reasons for allowance:

The prior art of record discloses all the limitations of claim 22 except the propagation of the information from an ingress portion to an egress portion of a network processor system ***through a switch fabric*** and then performing QOS monitoring operations on the egress portion of the network processor system and further subsequently transmitting the processed information to another card (again through a switch fabric – as specified by the VIEPs in the claim language) for transmission out of

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the network element. The prior art of record does not transmit the information through the switch fabric until the QOS processing has been performed; thus the switch fabric is only utilized one time per packet in the prior art. As the prior art of record fails to disclose this double traversal of the switch fabric, claim 22 is allowable over the prior art of record. Further, as claims 23-25 depend on claim 22, they are also allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

11. Claims **2-5, 10-15, 20, and 27-30** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claims **6-9, 16-19, and 21** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record discloses all the limitations of claims 1 and 26 as described in the rejection under 35 U.S.C. 102 (e) above. The prior art of record also discloses the use of counters by either the policing or flow control functionality of a

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given network. However, the prior art of record fails to disclose the limitation that the scheduler, flow controller, and the policing structure all use (in concert) the same plurality of counters associated with said ingress and egress cards to provide Quality of Service (QoS) parametric information necessary to effectuate a Service Level Agreement between a network service provider operating said network element and a subscriber for services available in said IP network.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,574,195 to Roberts, U.S. Patent 6,657,962 to Barri et al, and U.S. Patent 6,608,816 to Nichols all disclose flow control and policing mechanisms similar to the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert C. Scheibel whose telephone number is 703-305-9062. The examiner can normally be reached on 6:30-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 703-308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RCS 6-8-09
Robert C. Scheibel
Examiner
Art Unit 2666

DM

DANG TON
PRIMARY EXAMINER